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EXAMINER

TRUONG, THANHNGA B

ART UNIT

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2438

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/824,273	<b>Applicant(s)</b> HALL, ARON	
	<b>Examiner</b> THANHNGA B. TRUONG	<b>Art Unit</b> 2438	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 13, 2009 has been entered. Claims 1-27 are pending. Claim 28 is canceled by the applicant. At this time, claims 1-27 are still rejected.

### *Response to Arguments*

2. Applicant's arguments filed February 13, 2009 have been fully considered, but they are not persuasive. Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection.

As mentioned in the previous office action, although claim 22 has "storage" language, it does not prove to be statutory, since this term "computer-readable storage medium" does not support anywhere in the specification, which could construe as new matter. Therefore, claim 22 is still found non-statutory. In addition, the specification still recites **a propagated signal** (see paragraph [0012] of page 4 of specification), wherein the computer program product could be embodied and transferred via a propagated signal. Therefore, the 101 rejection is still maintained.

Applicant further argues:

Liang does not teach the limitation of claim 1, wherein quantify (e.g. determine or pre-determine) damages avoided by one or more blocked attacks.

Examiner respectfully disagrees with the applicant and still maintains that:

Liang's system and method for effectively managing damage caused by a computer virus epidemic in a network environment by effectively and rapidly distributing antivirus protection and **cure measures within the network so as to optimally reduce the level of damage during the virus epidemic (emphasis added) (column 2, lines 28-33 of Liang)**. Furthermore, Liang teaches a further embodiment according

to the invention for finding a virus is by searching the modification sections in files of the network system. Initially, the system finds a modified file in a predetermined time interval. The system then determines a first plurality of modified sections of the modified file. The system finds a second modified file in the predetermined time interval. Next, the system determines a second plurality of modified sections in the second file. The system compares the first modified file against the second modified file. The process is repeated for other files being modified in the predetermined time period. The management server receives info on the conditions of the virus infection. If no virus is found, i.e., all the modified sections from different modified files are not identical nor similar, then the process comes to the end. Otherwise, the management server is informed that there is possibly attack a virus is when modified sections from different modified files are identical or similar. The system accordingly quarantine an area containing device nodes having files with the modified sections. Finally, the system transfers an antivirus task into said the quarantine area for finding and eradicating the virus (column 2, line 66 through column 3, line 19 of Liang). Therefore, Liang, alone, could anticipate the limitation of claim 1.

The fact that Examiner may not have specifically responded to any particular arguments made by Applicant and Applicant's Representative, should not be construed as indicating Examiner's agreement therewith.

### ***Claim Objections***

3. Claim 22 is objected to because of the following informalities: Claim 22 recites "a computer program embodied in a computer-readable storage medium", wherein the computer-readable storage medium does not disclose anywhere in the disclosure. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. Claim 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: component or

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unit or module wherein claim element is a means (or step) plus function that invokes 35 U.S.C. 112, sixth paragraph. However, written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed invention. Thus, these essential missing component or unit or module is important and necessary to connect its relationship with the step of processing. Appropriate correction is required.

Claims 17-21 have limitation that are similar to those of claim 16, thus it is rejected with the same rationale applied against claim 16 above.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 10-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. Referring to claim 22:

Claim 22 recites “a computer program embodied in a computer-readable storage medium, and comprising computer instructions for: quantifying damages avoided by one or more blocked attacks; and calculating security protection consumption during a period of time.” It appears that any digital or analog signal can be transmitted to recordable type media to be stored thereon which direct the claims signal per se, therefore, claim 22 is non-statutory. In addition, the claim is clearly a software program and it is non-statutory as not being tangibly embodied in a manner so as to be executable. Furthermore, applicant has pointed out in the specification (paragraph [0012] of page 4) that the computer readable medium may comprise a disk, a device, **and/or a propagated signal**, which clearly including intangible media such as signals, carrier waves, transmissions, optical waves, transmission media or other media incapable of being touched or perceived absent the tangible medium through which they

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are conveyed. Therefore, claim 22 recites a non-statutory subject matter. Appropriate correction required. See MPEP 2106.

Claims 23-27 are depended on claim 22, thus they are rejected with the same rationale applied against claim 22 above.

b. Referring to claim 10:

i. This claim has limitations that is similar to those of claim 22, thus it is rejected with the same rationale applied against claim 22 above.

Claims 11-15 are depended on claim 10, thus they are rejected with the same rationale applied against claim 10 above.

c. Referring to claim 16:

i. This claim has limitations that is similar to those of claim 22, thus it is rejected with the same rationale applied against claim 22 above.

Claims 17-21 are depended on claim 16, thus they are rejected with the same rationale applied against claim 16 above.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Liang (US 7,062,553 B2).

a. Referring to claim 1:

i. Liang teaches a system comprising:

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(1) a processor (column 4, line 29; column of Liang; and a memory, coupled to the processor, wherein the memory is configured to provide the processor with instructions (**column 8, lines 38-44 of Liang**) which when executed cause the processor to quantify (e.g. determine or pre-determine) damages avoided by one or more blocked attacks (**column 2, line 66 through column 3, line 19; and column 7, line 66 through column 8, line 4 of Liang**); and calculate security protection consumption during a period of time (**see abstract; column 2, lines 34-44; column 11, lines 7-20 of Liang**).

b. Referring to claim 2:

i. Liang further teaches:

(1) wherein calculating security protection consumption further includes determining whether a blocked attack would have exploited a network vulnerability (**column 9, lines 1-11 of Liang**).

c. Referring to claim 3:

i. Liang further teaches:

(1) wherein determining whether a blocked attack would have exploited network vulnerability includes replaying the attack on an internal network (e.g., LAN) (**column 9, lines 1-11 of Liang**).

d. Referring to claim 4:

i. Liang further teaches:

(1) further comprising a scanner configured to scan one or more devices for vulnerabilities (**column 10, lines 22-31 and 51-63 of Liang**).

e. Referring to claim 5:

i. Liang further teaches:

(1) wherein the scanner is configured to quantify the risk of one or more devices (**column 11, lines 7-20 of Liang**).

f. Referring to claim 6:

i. Liang further teaches:

(1) wherein the scanner is located within a customer network **(column 10, lines 51-63 of Liang)**.

g. Referring to claim 7:

i. Liang further teaches:

(1) further comprising an intrusion suppression module configured to block attacks **(column 2, lines 40-44; column 7, line 66 through column 8, line 2 of Liang)**.

h. Referring to claim 8:

i. Liang further teaches:

(1) wherein the intrusion suppression module is configured to maintain a list of attacks sustained and blocked during a period of time **(column 6, lines 56-67; column 2, lines 34-44; column 11, lines 7-20 of Liang)**.

i. Referring to claim 9:

i. Liang further teaches:

1) wherein the intrusion suppression module is located outside (e.g., remote location) a customer network **(column 9, lines 5-7 of Liang)**.

j. Referring to claims 10-15:

i. These claims consist a network security method to implement from the network security apparatus of claim 1, thus they are rejected with the same rationale applied against claims 1-9 above.

k. Referring to claims 16-21:

i. These claims have limitations that are similar to those of claims 1-9, thus they are rejected with the same rationale applied against claims 1-9 above.

l. Referring to claims 22-27:

i. These claims consist a computer program stored on a computer-readable storage medium to implement by the network security method of



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claim 10 from the system of claim 1, thus they are rejected with the same rationale applied against claims 1-9 above.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liang (US 7,062,553 B2), and further in view of Colson et al (US 2003/0128229).

a. Referring to claim 1:

i. Liang teaches a system comprising:

(1) a processor (column 4, line 29; column of Liang; and a memory, coupled to the processor, wherein the memory is configured to provide the processor with instructions (**column 8, lines 38-44 of Liang**) which when executed cause the processor to quantify (e.g. determine or pre-determine) damages avoided by one or more blocked attacks (**column 2, line 66 through column 3, line 19 of Liang**); and calculate security protection consumption during a period of time (**see abstract; column 2, lines 34-44; column 11, lines 7-20 of Liang**).

ii. Although Liang teach the processor, memory as shown in column 8, lines 38-44, Liang does not clearly mention that memory is coupled or associated with CPU or processor to execute the program task (if indeed is not inherently). However, Gupta clearly teaches this limitation in Figure 3 and more detail on column 4, lines 7-13 of Gupta.

iii. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) modified the invention of Liang (if indeed is not inherently) with the teaching of Gupta to execute the program for antivirus control in a

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network system and, more particularly, damage control against virus outbreak in a network environment with a plurality of device nodes under malicious code attack (column 1, lines 15-18 of Liang).

iv. The ordinary skilled person would have been motivated to:

(1) modified the invention of Liang (if indeed is not inherently) with the teaching of Gupta for effectively executing the program for managing damage caused by a computer virus epidemic in a network environment by effectively and rapidly distributing antivirus protection and cure measures within the network so as to optimally reduce the level of damage during the virus epidemic (column 2, lines 29-33 of Liang).

b. Referring to claim 2:

i. Liang further teaches:

(1) wherein calculating security protection consumption further includes determining whether a blocked attack would have exploited a network vulnerability (**column 9, lines 1-11 of Liang**).

c. Referring to claim 3:

i. Liang further teaches:

(1) wherein determining whether a blocked attack would have exploited network vulnerability includes replaying the attack on an internal network (e.g., LAN) (**column 9, lines 1-11 of Liang**).

d. Referring to claim 4:

i. Liang further teaches:

(1) further comprising a scanner configured to scan one or more devices for vulnerabilities (**column 10, lines 22-31 and 51-63 of Liang**).

e. Referring to claim 5:

i. Liang further teaches:

(1) wherein the scanner is configured to quantify the risk of one or more devices (**column 11, lines 7-20 of Liang**).

f. Referring to claim 6:

i. Liang further teaches:

(1) wherein the scanner is located within a customer network **(column 10, lines 51-63 of Liang)**.

g. Referring to claim 7:

i. Liang further teaches:

(1) further comprising an intrusion suppression module configured to block attacks **(column 2, lines 40-44; column 7, line 66 through column 8, line 2 of Liang)**.

h. Referring to claim 8:

i. Liang further teaches:

(1) wherein the intrusion suppression module is configured to maintain a list of attacks sustained and blocked during a period of time **(column 6, lines 56-67; column 2, lines 34-44; column 11, lines 7-20 of Liang)**.

i. Referring to claim 9:

i. Liang further teaches:

1) wherein the intrusion suppression module is located outside (e.g., remote location) a customer network **(column 9, lines 5-7 of Liang)**.

### **Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached at 571-272-3799. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

/Thanhnga B. Truong/

Primary Examiner, Art Unit 2438

TBT

April 26, 2009